

Appendix Two

Sample Flood Plain Management Ordinance

Rehabilitation Inspection

GUIDE

A Step-By-Step Guide to
Rehabilitation Inspection

MINNESOTA



Trade &
**Economic
Development**

Business & Community
Development

Sample Floodplain Management Ordinance
General Floodplain Ordinance

October 17, 1990

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SAMPLE FLOOD PLAIN MANAGEMENT ORDINANCE

"GENERAL FLOODPLAIN ORDINANCE"

SECTION 1.0 STATUTORY AUTHORIZATION, FINDINGS OF FACT AND PURPOSE

1.1 Statutory Authorization. The Legislature of the State of Minnesota has, in Minnesota Statutes Chapters 103F and Chapter (394 for counties or 462 for municipalities) delegated the authority to local governmental units to adopt regulations designed to minimize flood losses. Minnesota Statute, Chapter 103F further stipulates that communities subject to recurrent flooding must participate and maintain eligibility in the National Flood Insurance Program. Therefore the _____, Minnesota does ordain as follows:

(local unit)

1.2 Statement of Purpose. The purpose of this ordinance is to maintain the community's eligibility in the National Flood Insurance Program and to minimize potential losses due to periodic flooding including loss of life, loss of property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

1.3 Warning of Disclaimer of Liability. This Ordinance does not imply that areas outside of the flood plain district or land uses permitted within such districts will be free from flooding and flood damages. This Ordinance shall not create liability on the part of the _____ or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decisions lawfully made thereunder.

SECTION 2.0 GENERAL PROVISIONS

2.1 Adoption of Flood Insurance Rate Map. The Flood Insurance Rate Map for the _____, dated _____, developed by the Federal Emergency

(local unit) *(date)*

Management Agency is hereby adopted by reference as the Official Flood Plain Zoning District Map and made a part of this ordinance. This map was previously entitled the Flood Hazard Boundary map dated _____.

2.2 Lands to Which Ordinance Applies. This ordinance shall apply to all lands designated as flood plain within the jurisdiction of _____.

(Local Unit)

2.3 Interpretation. The boundaries of the flood plain district shall be determined by scaling distances on the Official Flood Plain Zoning District Map. Where interpretation is needed as to the exact location of the boundaries of the flood plain district, the shall make the necessary interpretation based on elevations

Governing Body/Designated Official)

on the regional (100-year) flood profile, if available. If 100-year flood elevations are not available, the community shall: 1) Require a flood plain evaluation 'consistent with Section 4.3 of this Ordinance to determine a 100-year flood elevation for the site; or 2) base its decision on available hydraulic/hydrologic or site elevation survey data which demonstrates the likelihood the site is within or outside of the flood plain.

2.4 Definitions. Unless specifically defined below, words or phrases used in this Ordinance shall be interpreted so as to give them the same meaning as they have in common usage and so as to give this ordinance its most reasonable application.

2.41 Accessory Use or Structure - a use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

2.42 Basement - means any area of a structure, including crawl spaces, having its floor or base subgrade (below ground level) on all four sides, regardless of the depth of excavation below ground level.

2.43 Flood Fringe - that portion of the flood plain outside of the floodway.

2.44 Flood Plain - the channel or beds proper and the areas adjoining a wetland, lake or watercourse which have been or hereafter may be covered by the regional flood. Flood plain areas within shall encompass all areas designated as Zone A on the Flood Insurance Rate Map.

(local unit)

2.45 Floodway - the bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining flood plain which are reasonably required to carry or store the regional flood discharge.

2.46 Obstruction - any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, dredged spoil, channel modification, culvert, building, wire, fence, stockpile, refuse, fill, structure, stockpile of sand or gravel or other material, or matter in, along, across, or projecting into any channel, watercourse, lake bed, or regulatory flood plain which may impede, retard, or change the direction of flow, either in itself or by catching or collecting debris carried by floodwater.

2.47 Regional Flood - a flood which is representative of large floods known to have occurred generally in Minnesota and reasonably characteristics of what can be expected to occur on an average frequency in magnitude of the 100-year recurrence interval. Regional flood is synonymous with the term "base flood" used in the Flood Insurance Rate Map.

2.48 Regulatory Flood Protection Elevation. The Regulatory Flood Protection Elevation shall be an elevation no lower than one foot above the elevation of the regional flood plus any increases in flood elevation caused by encroachments on the flood plain that result from designation of a floodway.

2.49 Structure - anything constructed or erected on the ground or attached to the ground or on-site utilities, including, but not limited to, buildings, factories, sheds, detached garages, cabins, manufactured homes, travel trailers/vehicles not meeting the exemption criteria specified in Section 12.1 of this ordinance and other similar items.

SECTION 3.0 CONFLICT WITH PRE-EXISTING ZONING REGULATIONS AND GENERAL COMPLIANCE

3.1 The Flood Plain District as Overlay Zoning District. The flood plain zoning district shall be considered an overlay zoning district to all existing land use regulations of the community. The uses permitted in Sections 4.0 and 5.0 of this ordinance shall be permitted only if not prohibited by any established, underlying zoning district. The requirements of this ordinance shall apply in addition to other legally established regulations of the community and where this ordinance imposes greater restrictions, the provisions of this ordinance shall apply.

3.2 Compliance: No new structure or land shall hereafter be used and no structure shall be located, extended, converted, or structurally altered without full compliance with the terms of this ordinance and other applicable regulations which apply to uses within the jurisdiction of this Ordinance. Within the Floodway and Flood Fringe, all uses not listed as permitted uses in Section 4.0 shall be prohibited. In addition, a caution is provided here that:

3.21 New manufactured homes, replacement manufactured homes and certain travel trailers and travel vehicles are subject to the general provisions of this Ordinance and specifically Sections 4.0 and 12.0;

3.22 Modifications, additions, structural alterations or repair after damage to existing nonconforming structures and nonconforming uses of structures or land are regulated by the general provisions of this Ordinance and specifically Section 9.0; and

3.23 As-built elevations for elevated structures must be certified by ground surveys as stated in Section 7.0 of this Ordinance.

SECTION 4.0 PERMITTED USES, STANDARDS, AND FLOOD PLAIN EVALUATION CRITERIA

4.1 Permitted Uses in the Flood Plain. The following uses of land are permitted uses in the flood plain district:

4.11 Any use of land which does not involve a structure, an addition to the outside dimensions to an existing structure or an obstruction to flood flows such as fill, excavation, or storage of materials or equipment.

4.12 Any use of land involving the construction of new structures, the placement or replacement of manufactured homes, the addition to the outside dimensions of an existing structure or obstructions such as fill or storage of materials or equipment, provided these activities are located in the flood fringe portion of the flood plain. These uses shall be subject to the development standards in Section 4.2 of this ordinance and the flood plain evaluation criteria in Section 4.3 of this Ordinance for determining floodway and flood fringe boundaries.

4.13 Travel trailers and travel vehicles are regulated by Section 12.0 of this Ordinance.

4.2 Standards for Flood Plain Permitted Uses.

4.22 Fill shall be properly compacted and the slopes shall be properly protected by the use of riprap, vegetative cover or other acceptable method. The Federal Emergency Management Agency (FEMA) has established criteria for removing the special flood hazard area designation for certain structures properly elevated on fill above the 100-year flood elevation - FEMA's requirements incorporate specific fill compaction and side slope protection standards for multi-structure or multi-lot developments. These standards should be investigated prior to the initiation of site preparation if a change of special flood hazard area designation will be requested.

4.23 Storage of Materials and Equipment:

(a) The storage or processing of materials that are, in time of flooding, flammable, explosive, or potentially injurious to human, animal, or plant life is prohibited.

(b) Storage of other materials or equipment may be allowed if readily removable from the area within the time available after a flood warning or if placed on fill to the Regulatory Flood Protection Elevation.

4.24 No use shall be permitted which will adversely affect the capacity of the channels or floodways of any tributary to the main stream, or of any drainage ditch, or any other drainage facility or system.

4.25 All structures, including accessory structures, additions to existing structures and manufactured homes, shall be constructed on fill so that the basement floor, or first floor if there is no basement, is at or above the Regulatory Flood Protection Elevation. The finished fill elevation must be no lower than one foot below the Regulatory Flood Protection Elevation and shall extend at such elevation at least 151 beyond the limits of the structure constructed thereon.

4.26 All Uses. Uses that do not have vehicular access at or above an elevation not more than two feet below the Regulatory Flood Protection Elevation to lands outside of the flood plain shall not be permitted unless granted a variance by the Board of Adjustment. In granting a variance, the Board shall specify limitations on the period of use or occupancy of the use and only after determining that adequate flood warning time and local emergency response and recovery procedures exist.

4.27 Commercial and Manufacturing Uses. Accessory land uses, such as yards, railroad tracks, and parking lots may be at elevations lower than the Regulatory Flood Protection Elevation. However, a permit for such facilities to be used by the employees or the general public shall not be granted in the absence of a flood warning system that provides adequate time for evacuation if the area would be inundated to a depth greater than two feet or be subject to flood velocities greater than four feet per second upon occurrence of the regional flood.

4.28 On-site Sewage Treatment and Water Supply Systems: Where public utilities are not provided: 1) On-site water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems; and 2) New or replacement on-site sewage treatment systems must be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters and they shall not be subject to impairment or contamination during times of flooding. Any sewage treatment system designed in accordance with the State's current statewide standards for on-site sewage treatment systems shall be determined to be in compliance with this Section.

4.29 All manufactured homes must be securely anchored to an adequately anchored foundation system that resists flotation, collapse and lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state or local anchoring requirements for resisting wind forces.

4.3 Flood Plain Evaluation

4.31 Upon receipt of an application for a permit, manufactured home park development or subdivision approval within the flood plain district, the _____

(Designated Body/Local Official)

shall require the applicant to furnish sufficient site development plans and a hydrologic/hydraulic analysis by a qualified engineer or hydrologist specifying the nature of the development and whether the proposed use is located in the floodway or flood fringe and the Regulatory Flood Protection Elevation for the site. Procedures consistent with Minnesota Rules 1983 Parts 6120.5600 (Technical Standards and Requirements For Floodplain Evaluation) and 6120.5700 (Minimum Floodplain Management Standards for Local Ordinances) shall be followed during the technical evaluation and review of the development proposal.

4.32 The _____ shall submit one copy of all
(Designated Person/Body)
information required by Section 4.31 of this Ordinance to the respective Department of Natural Resources' Area Hydrologist for review and comment at least 20 days prior to the granting of a permit or manufactured home park development/subdivision approval by the community. The
_____ shall notify the respective Department of
(Designated Person/Body)
Natural Resources Area Hydrologist within 10-days after a permit or manufactured home park development/subdivision approval is granted.

SECTION 5.0 UTILITIES, RAILROADS, ROADS AND BRIDGES IN THE FLOOD PLAIN DISTRICT

All utilities and transportation facilities, including railroad tracks, roads and bridges, shall be constructed in accordance with state flood plain management standards contained in Minnesota Rules 1983 Parts 6120.5000 - 6120.6200.

SECTION 6.0 SUBDIVISIONS*

6.1 No land shall be subdivided and no manufactured home park shall be developed or expanded where the site is determined to be unsuitable by the _____
(Governing Body/Planning Commission)
for reason of flooding inadequate drainage, water supply or sewage treatment facilities. The
_____ shall review the subdivision/development proposal
(Governing Body/Planning Commission)
to insure that each lot or parcel contains sufficient area outside of the floodway for or fill ill placement for elevating structures, sewage systems and related activities.

6.2 In the Flood Plain District, applicants for subdivision approval or development of a manufactured home park or manufactured home park expansion shall provide the information required in Section 4.31 of this Ordinance. The _____
(Designated Person/Body)
shall evaluate the proposed subdivision or mobile home park development in accordance with the standards established in Sections 4.2, 4.3 and 5.0 of this Ordinance.

* This Section is not intended as a substitute for a comprehensive city or county subdivision. It can, however, be used as an interim control until the comprehensive subdivision ordinance can be amended to include necessary flood plain management provisions.

6.3 For all subdivisions in the flood plain, the Floodway and Flood Fringe boundaries, the Regulatory Flood Protection Elevation and the required elevation of all access roads shall be clearly labelled on all required subdivision drawings and platting documents.

6.4 Removal of Special Flood Hazard Area Designation: The Federal Emergency Management Agency (FEMA) has established criteria for removing the special flood hazard area designation for certain structures properly elevated on fill above the 100-year flood elevation. FEMA's requirements incorporate specific fill compaction and side slope protection standards for multi-structure or multi-lot developments. These standards should be investigated prior to the initiation of site preparation if a change of special flood hazard area designation will be requested.

SECTION 7.0 ADMINISTRATION

7.1 Permit Required. A Permit issued by the _____ shall be secured
(Designated Official)
prior to the construction, addition, or alteration of any building or structure; prior to the use or change of use of a building, structure, or land; prior to the change or extension of a nonconforming use; and prior to excavation or the placement of an obstruction within the flood plain.

7.2 State and Federal Permits. Prior to granting a Permit or processing an application for a variance, the _____ shall determine that the applicant has obtained all
(Designated Official)
necessary State and Federal permits.

7.3 Certification of Lowest Floor Elevations. The applicant shall be required to submit certification by a registered professional engineer, registered architect, or registered land surveyor that the finished fill and building elevations were accomplished in compliance with the provisions of this ordinance. The _____ shall maintain a record of the
(Designated Official)
elevation of the lowest floor (including basement) for all new structures and alterations or additions to existing structures in the flood plain district.

SECTION 8.0 VARIANCES

8.1 A variance means a modification of a specific permitted development standard required in an official control including this ordinance to allow an alternative development standard not stated as acceptable in the official control, but only as applied to a particular property for the purpose of alleviating a hardship, practical difficulty or unique circumstance as defined and elaborated upon in a community's respective planning and zoning enabling legislation.

8.2 The Board may authorize upon appeal in specific cases such relief or variance from the terms of this ordinance as will not be contrary to the public interest and only for those circumstances such as hardship, practical difficulties or circumstances unique to the property under consideration, as provided for in the respective enabling legislation for planning and zoning for cities or counties as appropriate. In the granting of such variance, the Board of Adjustment shall clearly identify in writing the specific conditions that existed consistent with the criteria specified in the respective enabling legislation which justified the granting of the variance.

8.3 Variances from the provisions of this Ordinance may be authorized where the Board of Adjustment has determined the variance will not be contrary to the public interest and the spirit and intent of this ordinance. No variance shall allow in any district a use prohibited in that district or permit a lower degree of flood protection than the Regulatory Flood Protection Elevation. Variances may be used to modify permissible methods of flood protection.

8.4 The Board shall submit by mail to the Commissioner of Natural Resources a copy of the application for proposed Variance sufficiently in advance so that the Commissioner will receive at least ten days notice of the hearing. A copy of all decisions granting a Variance shall be forwarded by mail to the Commissioner of Natural Resources within ten (10) days of such action.

8.5 Appeals. Appeals from any decision of the Board may be made, and as specified in this Community's Official Controls and also Minnesota Statutes.

8.6 Flood Insurance Notice and Record Keeping. The Zoning Administrator shall notify the applicant for a variance that: 1) The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and 2) Such construction below the 100-year or regional flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions. A community shall maintain a record of all variance actions, including justification for their issuance, and report such variances issued in its annual or biennial report submitted to the Administrator of the National Flood Insurance Program.

SECTION 9.0 NONCONFORMITIES

A structure or the use of a structure or premises which was lawful before the passage or amendment of this Ordinance but which is not in conformity with the provisions of this Ordinance may be continued subject to the following conditions:

9.1 No such use shall be expanded, changed, enlarged, or altered in a way which increases its nonconformity.

9.2 ~~An alteration within the inside dimensions of a nonconforming use or structure is permissible provided it will not result in increasing the flood damage potential of that use or structure.~~

See Local Ordinance

9.3 ~~The cost of all structural alterations or additions both inside and outside of a structure to any nonconforming structure over the life of the structure shall not exceed 50 percent of the market value of the structure unless the conditions of this Section are satisfied. The cost of all structural alterations and additions constructed since the adoption of the Community's initial flood plain controls must be calculated into today's current cost, which will include all costs such as construction materials and a reasonable cost placed on all manpower or labor. If the current cost of all previous and proposed alterations and additions exceeds 50 percent of the current market value of the structure, then the structure must meet the standards of Section 4.0 of this Ordinance for new structures.~~ *See Local Ordinance*

9.4 If any nonconforming use of a structure or land or nonconforming structure is destroyed by any means, including floods, to an extent of 50 percent or more of its market value at the time of destruction, it shall not be reconstructed except in conformity with the provisions of this Ordinance. The _____ may issue a Permit for reconstruction if the use
(Designated Body)
is located outside the floodway and, upon reconstruction, is adequately elevated on fill in conformity with the provisions of this ordinance.

SECTION 10.0 PENALTIES FOR VIOLATION

A violation of the provisions of this Ordinance or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of Variance) shall constitute a misdemeanor.

10.1 In responding to a suspected ordinance violation, the Zoning Administrator and Local Government may utilize the full array of enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact permits, orders for corrective measures or a request to the National Flood Insurance Program for denial of flood insurance availability to the guilty party. The community must act in good faith to enforce these official controls and to correct ordinance violations to the extent possible so as not to jeopardize its eligibility in the National Flood Insurance Program.

10.2 When an ordinance violation is either discovered by or brought to the attention of the Zoning Administrator, the Zoning Administrator shall immediately investigate the situation and document the nature and extent of the violation of the official control. As soon as is reasonably possible, this information will be submitted to the appropriate Department of Natural Resources' and Federal Emergency Management Agency Regional Office along with the Community's plan of action to correct the violation to the degree possible.

10.3 The Zoning Administrator shall notify the suspected party of the requirements of this Ordinance and all other Official Controls and the nature and extent of the suspected violation of these controls. If the structure and/or use is under construction or development, the Zoning Administrator may order the construction or development immediately halted until a proper permit or approval is granted by the Community. If the construction or development is already completed, then the Zoning Administrator may either (1) issue an order identifying the corrective actions that must be made within a specified time period to bring the use or structure into compliance with the official controls, or (2) notify the responsible party to apply for an after-the-fact permit /development approval within a specified period of time not to exceed 30-days.

10.4 If the responsible party does not appropriately respond to the Zoning Administrator within the specified period of time, each additional day that lapses shall constitute an additional violation of this Ordinance and shall be prosecuted accordingly. The Zoning Administrator shall also upon the lapse of the specified response period notify the landowner to restore the land to the condition which existed prior to the violation of this Ordinance.

SECTION 11.0 AMENDMENTS

All amendments to this ordinance, including revisions to the Official Flood Plain Zoning District Map, shall be submitted to and approved by the Commissioner of Natural Resources prior to adoption. The flood plain designation on the Official Flood Plain Zoning District Map shall not be removed unless the area is filled to an elevation at or above the Regulatory Flood Protection Elevation and is contiguous to lands outside of the flood plain. Changes in the Official Zoning Map must meet the Federal Emergency Management Agency's (FEMA) Technical Conditions and Criteria and must receive prior FEMA approval before adoption. The Commissioner of Natural Resources must be given 10-days written notice of all hearings to consider an amendment to this Ordinance and said notice shall include a draft of the ordinance amendment or technical study under consideration.

SECTION 12.0 TRAVEL TRAILERS AND TRAVEL VEHICLES**

Travel trailers and travel vehicles that do not meet the exemption criteria specified in Section 12.1 below shall be subject to the provisions of this Ordinance and as specifically spelled out in Sections 12.3-12.4 below.

12.1 Exemption - Travel trailers and travel vehicles are exempt from the provisions of this Ordinance if they are placed in any of the areas listed in Section 12.2 below and further they meet the following criteria:

- (a) Have current licenses required for highway use.
- (b) Are highway ready meaning on wheels or the internal jacking system, are attached to the site only by quick disconnect type utilities commonly used in campgrounds and trailer parks and the travel trailer/travel vehicle has no permanent structural type additions attached to it.
- (c) The travel trailer or travel vehicle and associated use must be permissible in any pre-existing, underlying zoning use district.

12.2 Areas Exempted For Placement of Travel /Recreational Vehicles:

- (a) Individual lots or parcels of record.
- (b) Existing commercial recreational vehicle parks or campgrounds
- (c) Existing condominium type associations.

12.3 Travel trailers and travel vehicles exempted in Section 12.1 lose this exemption when development occurs on the parcel exceeding 500 dollars for a structural addition to the travel trailer/travel vehicle or an accessory structure such as a garage or storage building. The travel trailer/travel vehicle and all additions and accessory structures will then be treated as a new structure and shall be subject to the elevation requirements and the use of land restrictions specified in Sections 4.0 of this Ordinance.

** Adopt this or similar language or place a statement in Section 12.0 that travel trailers /vehicles (including replacements and new commercial type uses and residential type subdivisions) are not permissible in the flood plain.

12.4 New commercial travel trailer or travel vehicle parks or campgrounds and new residential type subdivisions and condominium associations and the expansion of any existing similar use exceeding five (5) units or dwelling sites shall be subject to the following:

(a) Any new or replacement travel trailer or travel vehicle will be allowed in the Floodway or Flood Fringe Districts provided said trailer or vehicle and its contents are placed on fill above the Regulatory Flood Protection Elevation determined in accordance with the provisions of Section 4.3 of this Ordinance and proper elevated road access to the site exists in accordance with Section 4.0 of this Ordinance. No fill placed in the floodway to meet the requirements of this Section shall increase flood stages of the 100-year or regional flood.

(b) All new or replacement travel trailers or travel vehicles not meeting the criteria of (a) above may, as an alternative, be allowed if in accordance with the following provisions. The applicant must submit an emergency plan for the safe evacuation of all vehicles and people during the 100-year flood. Said plan shall be prepared by a registered engineer or other qualified individual and shall demonstrate that adequate time and personnel exist to carry out the evacuation. All attendant sewage and water facilities for new or replacement travel trailers or other recreational vehicles must be protected or constructed so as to not be impaired or contaminated during times of flooding in accordance with Section 4.28 of this Ordinance.